DOCUMENT RESUME

ED 237 887 CG 017 142

AUTHOR Rosse, Joseph G.
TITLE Patterns of Withdrawal Behaviors. Working Paper 83-10.
INSTITUTION Minnesota Univ., Minneapolis. Industrial Relations Center.
SPONS AGENCY Illinois Univ., Urbana. Dept. of Psychology.; Office of Naval Research, Washington, D.C.
PUB DATE Apr 83
GRANT N000-14-75C-0904
NOTE 37p.; Paper presented at the Annual Convention of the American Psychological Association (91st, Anaheim, CA, August 26-30, 1983). This report is based on the author's doctoral dissertation. Financial assistance also provided by the Charles W. Christie Foundation.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Employee Attitudes; Employee Responsibility; Employees; Employment Patterns; Health; *Job Performance; Job Satisfaction; *Labor Turnover; *Withdrawal (Psychology); *Work Attitudes
IDENTIFIERS *Absenteeism (Employee); *Tardiness

ABSTRACT

Studies of employee tardiness, absence, and turnover generally adhere to one of five models: generalized withdrawal, which proposes positive intercorrelations among withdrawal behaviors; independent forms, which hypothesizes non-significant correlations among withdrawal behaviors; progression of withdrawal, which suggests that individuals engage in a hierarchically-ordered sequence of withdrawal; and the alternate forms and compensatory models which both imply substitutability of withdrawal behaviors. In an attempt to test the predictions of these theoretical models, the longitudinal lateness, absence, and turnover of 63 predominantly female (84 percnt) hospital employees was recorded bimonthly by the subjects' supervisors for a 48-week period. Subjects' job satisfaction, attitudes, health and perceptions of ease of mobility were obtained through self-reports and interviews. An analysis of the results, though failing to provide unequivocal support for any of the five models, did verify the interrelatedness of withdrawal behaviors. Single behavior models and general withdrawal models proved to be too simplistic for understanding withdrawal behavior. The progression of withdrawal model was most strongly supported, demonstrating a progression from lateness to absence to turnover. A 2-week lag between behaviors was observed. Little evidence of an ability to substitute behaviors was noted. Following the compensatory model, withdrawal behavior did have a feedback effect on health, but not on subsequent job satisfaction. (BL)

ED237887

Not to be quoted or
reprinted without
author's permission.

Working Paper 83-10

PATTERNS OF WITHDRAWAL BEHAVIORS

Joseph G. Rosse

Industrial Relations Center
University of Minnesota

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

X Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Joseph G. Rosse

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CG 017142

April 1983

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, creed, color, sex, national origin, or handicap.

Abstract

In an attempt to clarify research and theory pertaining to employee withdrawal behaviors, this paper describes five conceptual models implicitly or explicitly underlying prior research. Longitudinal lateness, absence and turnover data from a sample of 63 hospital employees were then used to test the predictions derived from these models. Withdrawal behaviors were related to one another, but not in a simple fashion. The evidence provided moderate support for a progression of withdrawal from lateness to absence, and from absence to turnover. Little evidence of behavior substitutability was noted. Withdrawal behavior had a feedback effect on health, but not subsequent job satisfaction. Implications for a theory of employee withdrawal are discussed.

Patterns of Withdrawal Behaviors[1]

Researchers and practitioners alike have shown a continuing interest in the study of employee absence and turnover, and to a lesser extent, lateness. A review of prior research shows a concern with the costs of these behaviors, as well as with the role of individual, organizational and macro-environmental variables in explaining their incidence. Recent years have seen the development of more sophisticated models incorporating a wider range of interacting causal variables (e.g., Mobley, Hand, Griffeth and Meglino, 1979). However, as our conceptions of the antecedents of withdrawal have grown more complex, there has been relatively little effort to model the behaviors in a multivariate perspective. Although there have been many studies of absence and turnover, few researchers have studied both simultaneously, and fewer still have been concerned with the theoretical significance of the relations between the two. For lateness, this problem has been exacerbated by a shortage of even univariate studies.

The nature of inter-relations among withdrawal behaviors is not a trivial question. If the dominant (albeit implicit) assumption of independence is incorrect, further development of behavior-specific models is unlikely to be of much practical or theoretical import. For example, if there is an hierarchical ordering of withdrawal responses (as in the progression of withdrawal hypothesis), exhibition of more minor behaviors (e.g., tardiness) might serve as an early warning indicator of more serious withdrawal tendencies (e.g., turnover). Alternatively, if lateness, absence and turnover

are used as non-sequential, alternate forms of withdrawal, organizational reward/sanction systems focussed exclusively on any one of the behaviors are unlikely to be successful. In fact, the result may be a "symptom substitution" effect, whereby a non-constrained behavior is substituted for the regulated one.

Conceptual Models

One may consider at least five possible relations among lateness, absence and turnover and find theory and some data in support of each. Proponents of a generalized withdrawal syndrome (or spillover model) propose that one should find positive intercorrelations among the behaviors, due to the similarity of their causes (Beehr & Gupta, 1978). An aversive environment is perceived to create a non-specific avoidance response in which any means of increasing distance from the noxious stimulus is sought. Moreover, there may exist a functional relationship among behavioral responses such that engaging in one behavior makes it more likely that the person will also perform others. For example, workers who have made plans to accept employment elsewhere may be more likely to be absent or late if they feel less threatened by the sanctions organizations employ for absence or tardiness.

Alternatively, some writers have argued that absence and turnover should be unrelated to one another, either due to differences in causes (Porter and Steers, 1973; Steers and Rhodes, 1978), or differences in consequences (March and Simon, 1958). Essentially the null hypothesis, this Independent Forms model hypothesizes non-significant correlations among withdrawal behaviors.

According to the progression of withdrawal hypothesis, individuals engage in an hierarchically-ordered sequence of withdrawal ranging from its most minor form to a complete break from the organization, i.e., quitting. Despite its general popularity, the logic of the progression of withdrawal model has not been well specified. First, the theoretical rationale for such a phenomenon is unclear. Possible explanations might include: (a) a worsening of organizational conditions, requiring progressively more potent forms of avoidance; (b) a new employee's gradual acknowledgement of a lack of fit with the organization; (c) an iterative adaptive process in which dissatisfied employees initially experiment with adaptive responses that hold the fewest negative consequences; (d) "reinforced deviance" in which employees find the rewards of withdrawal greater than its costs, and are encouraged to attempt progressively more rewarding forms (note, however, that this explanation does not necessarily account for a progression from absence to turnover).

A number of assumptions underlying these possible explanations have not been well articulated or tested. Perhaps the most obvious is that the progresion concept should apply to a range of behaviors, which presumably are seen by organizational members to fall along a continuum of avoidance potential (or cost/reward). Yet nearly all research has investigated only absence and turnover; only one, recent study of progression among more than two behaviors was located (Clegg, 1983). Nor has much research investigated employees' perceptions of the avoidance/reward value of such behaviors.

With the development of multivariate progression models must come a greater concern with the role of time. The nature of sequential ordering of variables is currently ambiguous. Should lateness precede absence, which in turn precedes turnover? Or should we expect increased turnover following either absence or lateness? Moreover, what is the time lag between behaviors? Will it be the same between lateness and absence as between absence and quitting?

Given the ambiguity of the underlying theory, it should not be surprising that evidence regarding the progression hypothesis is of generally poor quality. Most of the cited support takes the form of a positive correlation between absence and turnover (Clegg, 1983; Department of Labor, 1972; Herzberg, Mausner, Peterson and Capwell, 1957; Lyons, 1972; Melbin, 1961; Muchinsky, 1977). Adler and Golan (1981), Beehr and Gupta (1978), Chadwick-Jones, Brown, Nicholson and Sheppard (1971), and Clegg (1983) have reported positive correlations between absence and lateness. Such evidence is insufficient to distinguish between a simple spillover model and a progression effect. Three researchers have investigated the predicted "surge" in absence prior to quitting. Evidence of higher absence prior to quitting was reported by Waters and Roach (using one year time intervals, 1979) and Burke and Wilcox (using three-month periods, 1972). Miller (Note 1), using finer time intervals, found no evidence of a pre-termination increase in absence. Finally, Adler and Golan (1981) found no evidence of a lateness-absence progression effect with cross-lagged correlational data using twelve-month time intervals.

The alternate forms and compensatory models both imply substitutability of withdrawal behaviors, but for different reasons. According to the alternate forms hypothesis, the probability of one form of response (e.g., absence) is increased in the presence of constraints on an alternative behavior (e.g., quitting). Following March and Simon's (1958) model of turnover, most research has been concerned with the direct effect of perceived ease of mobility on turnover (Miller, Katerberg and Hulin, 1978; Mobley, Horner and Hollingsworth, 1978; Schneider, 1976), or its moderating effect on attitude -- turnover relations (Dansereau, Cashman and Graen, 1974; Miller, Note 2). Miller (Note 2) more specifically tested the alternative forms hypothesis by investigating the relations between ease of one variable and the frequency of the alternate behavior. He found a positive correlation between ease of absence and turnover, but failed to find evidence of greater absence with barriers impeding turnover. No studies of crossover relations between lateness and either absence or turnover were located.

A second form of behavioral constraint may be attitudinal. Fishbein and Ajzen (1975) have argued that behavior-specific attitudes are more proximal (hence more powerful) predictors of behavior than more general attitudes (such as job satisfaction). A negative attitude towards one's work may fail to translate into voluntary termination if the individual feels that quitting is an inappropriate response. Hom, Katerberg and Hulin (1979), Newman (1974), and Miller (Note 2) have reported positive associations between favorable attitudes regarding quitting and actual turnover, although neither Newman nor Miller found a significant relationship between attitude toward attendance and absence. Miller and Newman also assessed the

cross-over predictions by correlating attitudes toward one behavior with incidence of the other. Contrary to the predictions of the Alternate Forms model, both found weak but positive covariance between attitude towards absence and turnover, and non-significant associations between attitude towards quitting and absence. Once again, no research pertaining to lateness was found.

A theme underlying much of the above discussion (indeed, most of the absence and turnover literature) is that employees purposefully decide to be late, or absent, or to quit, presumably as a means of avoiding a noxious work environment. (A thorough discussion of the role of choice, intentionality and impulsiveness is beyond the scope of this paper. The reader is referred to Hom et al. (1979); Kraut (1975); Miller (Note 2); Mobley et al. (1979); Waters and Roach (1979) for evidence of the importance of intentions to quit in predicting turnover, and to Miller and Rosse (Note 3) for a discussion of the decision process in withdrawal.) If absence, lateness and turnover all represent means of avoiding an undesired stimulus, there should be no need to engage in more than one form of (successful) avoidance (Hill and Trist, 1955). As an example, it is sometimes suggested that absence provides a "relief valve" function that reduces the likelihood of quitting. Therefore, negative behavior inter-correlations are implied by the compensatory model. However, this alone is insufficient to distinguish the compensatory model from the alternate forms model which also hypothesizes inverse associations. A second, and extremely important, implication is that the use of withdrawal behaviors should have "remedial" effects on subsequent job attitudes. It is surprising to note that this assumption -- central to

"withdrawal" theories of absence and turnover -- has received little or no empirical verification to date.

Methodological Issues

Previous research concerning relations among lateness, absence and turnover has tended to rely on research designs lacking sufficient complexity to answer questions of interest. In particular, there has been a general failure to use multiple measurements of behaviors (as well as attitudinal predictors) across time. Clegg (1983), in an exception to this rule, has pointed out that the failure to use multiple assessments creates problems in attributing causality to correlational results. A further point may be made that the direction of relationships predicted by the previously described models may differ in cross-sectional versus longitudinal designs. This point is illustrated in Table 1. Behavior inter-correlations may be computed within time periods (e.g., frequency of absence with frequency of lateness during 1983) or across time periods (e.g., frequency of lateness during 1982 with frequency of absence during 1983). For the Independent Forms, Spillover and Alternate Forms models, this distinction is not of great importance. If the behaviors are truly independent, they should be uncorrelated both within and across time periods. Similarly, a generalized trend towards "deviance" should produce positive correlations among the behaviors, and a tendency to use them as alternate responses should result in negative inter-correlations, regardless of the time period being used.

- - - - - - - - - - - - - - -

Insert Table 1 about here

- - - - - - - - - - - - - - -

However, the Progression of Withdrawal and Compensatory models imply differences in the direction of correlations with different measurement strategies. The progression notion hypothesizes positive inter-correlations over time (as employees are sequentially late, absent and then quit), but negative inter-correlations within sufficiently short intervals (i.e., individuals are not expected to be late, absent and quit within one week). Similarly, since the Compensatory model assumes that successful avoidance reduces the need for further withdrawal, we hypothesize negative inter-correlations over time. But within time periods the direction of the relation will depend on whether most individuals have found successful means of coping with dissatisfaction. In a sample of newly hired workers (as in the present study), many individuals may be experimenting with alternative responses, before "settling into" a normal compensatory pattern. Thus, during the initial weeks of the study within-time inter-correlations might be positive, negative or zero, but the compensatory model would hypothesize a trend towards negative inter-correlations after employees had become acclimated.

A problem with the distinction between within-time and across-time correlational patterns arises over the issue of length of time intervals. At what point is a correlation no longer "within" a particular time period? As previously noted, the limited development of a theory of withdrawal makes this a serious issue. In this research, weekly intervals are assumed to represent the minimum (although not necessarily optimal) length of intervals.

An additional limitation of prior research has been an overemphasis on correlational evidence of association among behaviors. This has been most manifest in studies of the Progression hypothesis (as previously noted), but also has implications for the Alternate Forms and Compensatory models. The critical test of the Progression of Withdrawal model is an hierarchical ordering of behaviors, such that the probability of absence is greater shortly after lateness, and the probability of turnover is greater following absence. Although not explicitly stated by prior researchers, it is tentatively hypothesized that the probability of turnover will also be greater following lateness.

Similarly, in a sample of experienced employees, the Compensatory and Alternate Forms models make identical predictions concerning behavior inter-correlations. What distinguishes the models is the nature of the causes and consequences of the behaviors. The Alternate Forms model hypothesizes that attitudinal and opportunity constraints will operate to increase the probability of one or another behavior. Specifically, increased absence or lateness is hypothesized to occur with individuals for whom turnover is constrained by a perceived lack of alternative employment opportunities. (Since no measure of perceived ease of absence or lateness was included in this study, symmetrical constraint effects cannot be tested.) Similarly, attitudinal constraints are expected such that a negative evaluation of one behavior should result in increased likelihood of alternative behaviors.

According to the Compensatory Model, engagement in any of the withdrawal behaviors should have a positive feedback effect (i.e., improve) subsequent affect. It might be noted that while this assumption seems to underlie most "withdrawal" research, it is opposite to the prediction that might

be made by social information-processing theorists (e.g., Salancik and Pfeffer, 1978). Thus, this study provides a competitive test of the two sets of assumptions.

A second test of the Compensatory Model uses employee health as a dependent variable. According to proponents of a generalized withdrawal model, the noxious environment that produces withdrawal tendencies also represents a health risk to workers (Gupta and Jenkins, 1980). A substantial empirical literature verifies the link between employee health and both job stress (Beehr and Newman, 1978; House, 1974a, 1974b; Jenkins, 1971; Sales, 1969) and job dissatisfaction (House, 1974b; Kasl, 1980; McDonald and Gunderson, 1974; Roman and Trice, 1972). It is therefore hypothesized that dissatisfied workers who fail to withdraw should show progressive signs of health deterioration. Because of the difficulty in following up subjects who quit, the feedback effects of quitting were not assessed. Thus, this does not represent a complete test of the Compensatory Model.

It should be noted that this research does not represent competitive theory-testing in a pure sense. Although each of the five models present a different set of hypotheses, they are not orthogonal. In particular, it is conceivable that the feedback hypotheses of the Compensatory Model could co-exist with the Alternate Forms or Spillover models. This research is best thought of as an exploratory and hypothesis-generating, rather than theory-testing, endeavor.

Method

Subjects

Seventy-one newly hired, full-time employees of a small (108 bed), non-union, secular hospital in a medium-sized central Illinois town were asked to participate in a study of employees' reactions to a new job. Forty-eight of these subjects were assigned to a follow-up group and were interviewed about a variety of job-related factors (see Rosse, Note 4, for a description of these results); every third subject was assigned to a control group for which only attendance data were regularly collected. Since these two groups showed no major differences in demographic/job characteristics, job attitudes, or attendance, they were combined for these analyses. Four subjects decided not to continue their participation (principally because of time constraints), and an additional four either quit or were terminated within the first week of the study, and were thus excluded due to insufficient data. The remaining 63 respondents were young (mean age = 26 years), predominantly (84%) female, well- educated (13.4 years of schooling) and had relatively few years of experience in their career (M = 2.7 years). Although multiple departments were represented, the majority of respondents were from Nursing Service (56%) and Housekeeping (20%). All three shifts were represented.

Measures

Lateness, absence and turnover information was recorded on special forms provided on bi-monthly basis to subjects' supervisors. Frequency and time-lost (duration) measures were highly correlated (r = .94); the frequency measure was retained due to conceptual advantages (Muchinsky, 1977;

Nicholson et al., 1977), including its similarity to the frequency measure of lateness. Thirty subjects quit, resulting in a 48% turnover rate. No attempt to distinguish between voluntary and involuntary turnover, nor between excused and non-excused lateness and absence was made (or judged appropriate).

Self-report measures of job satisfaction; attitudes regarding lateness, absence and turnover; employee health; and perceived ease of mobility were obtained only from the forty-two subjects who received regular interviews. Overall job satisfaction was measured with an 11-option Faces-format item (Kunin, 1955), with a mean and standard deviation of 8.1 (2.2). Attitudes toward being late ($\underline{M}$ = 2.41, $\underline{SD}$ = 0.9), being absent ($\underline{M}$ = 2.88, $\underline{SD}$ = 1.5) and quitting (M = 3.37, SD = 1.9) were assessed on seven-point, bi-polar scales (ranging from "Very bad" to "Very good"). Physical and mental health was measured by a 31 item checklist of somatic complaints and mood states modeled after the scale used by Gurin, Veroff and Feld (1960). Respondents were asked how often they had suffered from each symptom, using a four-point scale ranging from "Almost never" to "Nearly every day". Scale scores ($\underline{M}$ = .54, $\underline{SD}$ = .39) exhibited good internal consistency (α = .86) and stability (temporal α = .91).

Ease of mobility was measured by two pairs of items. Within each pair of items, one assessed the perceived availability of jobs very similar to the respondent's present job, and the other pertained to the availability of any other jobs the person would be willing to accept; each of these items was multiplied by the perceived time required to obtain such a job. These products were then summed to create the ease of mobility measure (overall $\underline{M}$ = 13.3; $\underline{SD}$ = 6.6; temporal Alpha with three measurements = .84).

Design and Analysis

New hires in the follow-up group were initially contacted before starting work. They were told that they would be interviewed ten times over a six month period, that their responses would be confidential, and that each interview would require about thirty minutes during their normal work hours. Overall job satisfaction was measured after one, two, three, five, seven, ten, fourteen, eighteen and twenty-three weeks on the job; behavior-specific attitudes after two weeks on the job; and the health measure at the initial interview (to establish a baseline) and after five, fourteen and twenty-three weeks of work. Attendance data for both groups were recorded as weekly frequencies; the mean absence frequency (averaged across all weeks of the study) was .14, with a standard deviation of .07. The corresponding figures for lateness were M = .05, SD = .05.

Subjects were hired between July 15, 1980 and February 15, 1981. Interview data was collected for a six month period after each person's entry into the organization, but attendance data was collected for the length of the study (for these purposes, 48 weeks), or until a person quit. Because of these differences in measurement periods, annualized absence and lateness frequencies were also computed for each person. For absence, M = 10.0, SD = 12.9; the median (required by a few outliers with very high lateness during a very short tenure) for lateness was .05, with a standard deviation of 47.5. Weekly lateness, absence and quit rates were used for within-time analyses, whereas annualized lateness, absence and time-aggregated turnover was used for across-time analyses.

Results

Correlations among behaviors, computed both within and across time periods, are shown in Table 2. The non-significant average within-time correlations are not consistent with any of the models, except perhaps the Compensatory Model, where they might be expected early in the study. However, since no apparent trend towards increasingly negative associations were found in the weekly correlations comprising the average, this does not lend support to the Compensatory Model. These results rule out the Spillover and Independent Forms models, which rely strictly on correlational evidence for support. For the other three models, analysis of the additional factors were required before any conclusions could be reached.

- - - - - - - - - - - - - - -

Insert Table 2 about here

- - - - - - - - - - - - - - -

The Progression model's hypotheses of surges in lateness prior to absence, and in lateness and absence prior to quitting were tested by comparing the conditional probability of a subsequent behavior (e.g., quitting) given the antecedent behavior (e.g., being absent) to the overall probability of the subsequent behavior. The model predicts that the conditional probabilities should have been greater than the base rate for the weeks immediately following the conditioning event. The plot of conditional probabilities for each behavior may be seen in Figure 1. The three plots were similar in showing a generally higher probability of the subsequent behavior within a few weeks of the conditioning behavior. However, only in the case of lateness preceding absence were the conditional probabilities significantly greater than the overall base rate (using a one-tailed t-test of

differences between non-independent proportions; McNemar, 1969). The failure to find significant differences in the other cases may have been attributable to the small sample, exacerbated by the infrequent nature of the behaviors. Indeed, the similarity of the plots seemed to suggest

- - - - - - - - - - - - - - - -

Insert Figure 1 about here

- - - - - - - - - - - - - - - -

parallelism in the temporal processes underlying each behavior. This conjecture was tested by treating each week after a conditioning event as a case, and computing the correlation across weeks (cases) of the conditional probabilities of each behavior. Despite being based on a sample of only eight "cases", these correlations were strong and significant ($r_{p(AIL),p(QIA)} = .82$; $r_{p(AIL),p(QIL)} = .85$; $r_{p(QIL),p(QIA)} = .72$). Based on these data, there appears to be tentative support for the Progression of Withdrawal model. Both correlational (across-time) and conditional probability analysis confirmed a progression from lateness to absence; although the latter data were not statistically reliable for an absence -- turnover linkage, the weight of evidence was strongly suggestive. However, for lateness as a predictor of turnover, neither form of evidence was as impressive; in the absence of either theory or prior evidence to the contrary, it seems best to reject the hypothesis of a progression from lateness directly to turnover.

Little evidence favorable to the Alternate Forms Model was found. As previously noted, behavior inter-correlations were inconsistent with the model's predictions (Table 2). Hierarchical multiple regression analysis was used to test the additional hypotheses of attitudinal or opportunity constraints increasing the probability of alternative behaviors. For each

of the behaviors, job satisfaction (either the last measurement before quitting, or the average of all nine measures for those who didn't quit) was entered as the first predictor. The hypothesized constraining variable was then entered into the equation, followed by the job satisfaction X constraint interaction term (a simple multiplicative product). The additional predictive power of each term was then assessed by evaluating the significance of the increment in R^2.

Results for behavior-specific attitudes are shown in Table 3. Most obvious is the generally weak nature of the relations. In only one case was there significant evidence of a constraining effect: absence frequency was reliably higher among individuals with negative attitudes toward turnover. The corresponding interaction term was not significant, probably due to the

- - - - - - - - - - - - - - -

Insert Table 3 about here

- - - - - - - - - - - - - - -

extremely weak relation between overall job satisfaction and lateness.

Evidence pertaining to the hypothesized constraining effects of perceived ease of mobility is shown in Table 4. Relations were again weak, although a significant linear effect of ease on lateness was noted; the interaction term was not significant. Although irrelevant to the Alternate Forms Model, it is interesting to note that mobility ease had no effect on turnover, nor on the job satisfaction -- turnover linkage. In sum, the evidence warrants rejection of the Alternate Forms Model.

- - - - - - - - - - - - - - -

Insert Table 4 about here

- - - - - - - - - - - - - - -

Finally, the Compensatory Model received only partial support. This model's first prediction -- negative inter-correlations among behaviors -- was not supported. More crucial to the model was the hypothesis of positive feedback effects of withdrawal on subsequent job attitudes and health. To evaluate the hypothesized feedback effect on job affect, respondents were divided into "Adapting" and "non-Adapting" groups according to whether or not they had been absent or late during an interview period (this determination was made separately for each interview period). Affect change scores were then computed for all individuals by subtracting immediately prior overall satisfaction from immediately subsequent satisfaction. If the behaviors played an adaptive role, changes in affect should have been more positive for Adapters than for non-Adapters. Measures of attendance and job satisfaction were available for eight interviews -- in none of these instances did Adapters show a gain in job satisfaction following absence or lateness. In seven of the cases, Adapters showed more negative changes in affect than non-Adapters, and in one case this difference was statistically significant. The sole case in which difference scores were in the hypothesized direction was not significant.

The final hypothesis drawn from the Compartmentalization Model pertains to detrimental effects on health arising from a failure to adapt. A measure of health risk was devised by considering subjects' degree of dissatisfaction and their failure to withdraw. Dissatisfaction was operationalized by reverse-scoring the overall satisfaction (Faces) measure and assigning a value of zero to anyone more satisfied than the theoretical midpoint (a neutral face). To compute the Risk measure, absence and lateness frequences for each interview period were added and the sum was multiplied by the

dissatisfaction score; these scores were then summed to form a cumulative Risk measure. The correlation between this Risk measure and each individual's final health measure was highly significant (r = .58, $p < .001$). In order to control for differences in respondents' health before starting work, each person's baseline health score was then removed statistically; the resulting partial correlation was still significant (pr = .40, $p < .05$). This important finding represents the sole evidence in support of the Compensatory Model.

Discussion

The results of this study begin to answer some long-standing questions of interest to withdrawal researchers, but also raise some new questions. Although these data failed to provide unequivocal support for any of the models, they do suffice to rank order the relative viability of alternative conceptualizations of the withdrawal process.

The lack of support for the Independent Forms and Spillover models is particularly interesting because it confirms a growing suspicion that relations among lateness, absence and turnover should not be expected to be simple. Neither traditional single-behavior models nor simplistic general withdrawal models appear to be suitable for understanding these behaviors. This point is likely to become even more salient as withdrawal models broaden to include a wider range of behaviors than simply lateness, absence and turnover (e.g., Gupta and Jenkins, 1980; Miller and Rosse, Note 3).

The Alternate Forms Model represents one attempt at a more complex conceptualization of withdrawal. The only evidence consistent with this model were the linear effects of attitude towards turnover on absence, and of ease of mobility on lateness. Although this evidence is technically adequate for

hypothesis testing, demonstration of significant constraint X job satisfaction interactions would have been more theoretically satisfying. Of what significance is the finding that people with negative attitudes toward quitting are more likely to be absent, in the absence of evidence that the two behaviors are seen as alternative responses to dissatisfying work conditions? Without this theoretical linkage it is difficult to place much confidence in the limited evidence supporting the model.

One explanation for the non-substitutability of behaviors is that they are seen as points on a continuum. Indeed, the Progression of Withdrawal Model received the strongest support of any of the models, although a small sample and low base rates resulted in some trends not reaching accepted levels of significance. That a progression from lateness to absence was found is particularly important, because earlier studies had focused almost entirely on a progression from absence to turnover. While the latter effect was not found to be statistically reliable in these data, the consistency of lateness → absence and absence → turnover temporal patterns (coupled with similar prior findings) suggests that a tentative acceptance of the progression hypothesis is justified.

This study also offers some insight into the temporal process underlying the progression effect that should aid future researchers. The plot of conditional probabilities (Figure 1) seems to show a consistent two week lag between behaviors, suggesting that research which aggregates behavior frequencies by monthly or semi-annual time intervals is unlikely to find evidence of progressive withdrawal. That quitting appears to follow lateness

by the same interval that absence follows lateness, and turnover follows absence, seems quizzical, however. A logical progression model would suggest lateness→absence→turnover; if absence follows lateness by about two weeks, and turnover follows absence by a similar interval, shouldn't the lateness -- quitting interval be approximately four weeks? Given that evidence of a lateness-quitting progression was weak in these data, this paradox is perhaps best treated as a statistical anomaly. It may be worth checking in future studies, however.

In some ways, the Compensatory Model presents the most interesting and crucial set of hypotheses. For that reason, the mixed evidence relating to the model presents a particularly intriguing picture. The failure to find a positive feedback effect on job satisfaction seems to fly in the face of the concept of withdrawal behavior as an escape mechanism. Moreover, why is there a remedial effect on employees' health, but not on their job attitudes?

The answer to this paradox may be that the assumption of an affective feedback effect is too simplistic. Social information processing theory (cf. Salancik and Pfeffer, 1978) provides an alternative explanation which may fit the data better. According to this perspective, the meaning of an experience is heavily dependent on the interpretation of social cues (e.g., social mores, expressed and implied attitudes of ourselves and significant others, and the behaviors of ourselves and those around us). The meaning of being absent is affected not only by one's reason for being absent, but also by the social significance of being absent. For example, absence due to illness or family emergency may be seen as an unavoidable and benign act, whereas taking a day off to go shopping or visit friends may be seen as an absence of "convenience", suggesting some mismatch between the goals and

values of the employee and employer. When asked by a researcher to describe her attitude towards her work, an employee reviews the relevant clues (including her frequent occasions of absence and tardiness, the overheard remarks of coworkers that "Betty sure has a bad attitude," that she often complains to her supervisor about working conditions) and concludes that she is dissatisfied. Adherence to this theory suggests that engaging in behaviors socially (or personally) interpreted as indicative of negative affect will in fact produce, maintain, and even increase negative affect.

Alternatively, it may be that these behaviors are adaptive in an attitudinal sense only if they are successful in changing the work setting. By being absent, or otherwise withdrawing from work temporarily, an employee may be able to reduce his/her level of stress and thus reduce stress-related health consequences. However, the avoidance of work has not made it any less inherently unpleasant, so there is no improvement in affect.

Conclusion

This study has helped to clarify our understanding of employee withdrawal. Lateness, absence and turnover are best viewed not as unrelated behaviors, but as sequentially-related, possibly substitutable, forms of response with important consequences for subsequent worker health. Future research is needed to extend these findings in two major areas.

First, replication within a larger sample of employees from a different organizational setting would be warranted. Although this sample represented a reasonable cross-section of new hospital employees, it was biased by a majority of young, well-educated, professional/technical workers. Informal

comments during the interviews suggested that a sense of professionalism and the responsibilities of their life-saving roles may have reduced the incidence of withdrawal. Moreover, it is reasonable to suppose that the use of new employees may have further attenuated these behaviors. Replication in a more diverse sample would materially increase confidence in the generalizability of these results.

A second important direction for future research is to pursue investigation of the process by which an individual comes to engage in a particular behavior. The present investigation was limited to showing correlational patterns between individual behaviors. This was an important first step, but was limited by its inability to assess a person's choice among alternative adaptive mechanisms. An alternative approach would be to use a more open-ended investigatory style. Rather than using a standardized set of instruments, respondents might simply be asked what (if anything) they had done in response to aversive work conditions, and what had been the consequences of these coping strategies. This approach has the potential for better understanding of both the choice process and the coping process. That is, careful questioning might reveal the kinds of decisions that result in the choice of one behavior rather than another (or none at all), and might also better explain why the behaviors seem to help a person cope with stress but not improve job attitudes. This type of research might also help to distinguish affect-related use of behaviors from that which is coincidental or uncontrollable. As a simple example, absence that is due to causes beyond the employee's control (e.g., due to serious illness) is probably best not considered withdrawal. This kind of research may be able to distinguish accurately between "legitimate" absence and that used for withdrawal.

Reference Notes

1. Miller, H. Some evidence concerning the progression of withdrawal hypothesis. Working Paper 82-03, Industrial Relations Center, University of Minnesota, Minneapolis, Minnesota, 1982.

2. Miller. H. Withdrawal behaviors among hospital employees. Unpublished doctoral dissertation, Department of Psychology, University of Illinois, Urbana, Illinois, 1981.

3. Miller, H. and Rosse, J. A tentative model of behavioral adaptation in organizations. Unpublished manuscript, Industrial Relations Center, University of Minnesota, Minneapolis, Minnesota, 1983.

4. Rosse, J. Adaptation to Work: An analysis of employee health, withdrawal and change. Working Paper 82-19, Industrial Relations Center, University of Minnesota, Minneapolis, Minnesota, 1982.

References

Adler, S., and Golan, J. Lateness as a withdrawal behavior. Journal of Applied Psychology, 1981, 66(5), 544-554.

Beehr, T., and Gupta, N. A note on the structure of employee withdrawal. Organizational Behavior and Human Performance, 1978, 21, 73-79.

Beehr, T., and Newman, J. Job stress, employee health, and organizational effectiveness: A facet analysis, model and literature review. Personnel Psychology, 1978, 31, 665-699.

Burke, R., and Wilcox, D. Absenteeism and turnover among telephone operators. Personnel Psychology, 1972, 25, 639-648.

Chadwick-Jones, J., Brown, C., Nicholson, N., and Sheppard, C. Absence measures: Their reliability and stability in an industrial setting. Personnel Psychology, 1971, 24,463-470.

Clegg, C. Psychology of employee lateness, absence and turnover: A methodological critique and an Empirical Study. Journal of Applied Psychology, 1983, 68(1), 88-101.

Dansereau, F., Cashman, J., and Graen, G. Expectancy as a modertor of the relationship between job attitudes and turnover. Journal of Applied Psychology, 1974, 59, 228-229.

Fishbein, M., and Azjen, L. Beliefs, attitude, intention and behavior: An introduction to theory and research. Reading, MA: Addison-Wesley, 1975.

Gupta, ., and Jenkins, G. The structure of withdrawal: Relationships among estrangement, tardiness, absenteeism and turnover. Springfield, VA: National Technical Information System, 1980.

Herzberg, F., Mausner, B., Peterson, R., and Capwell, D. Job attitudes: Review of research and opinion. Pittsburgh: Psychological Services of Pittsburgh, 1957.

Hill, J., and Trist, E. Changes in accidents and other absences with length of service. Human Relations, 1955, 8, 121-152.

Hom, P., Katerberg, R., and Hulin, C. Comparative examination of three approaches to the prediction of turnover. Journal of Applied Psychology, 1979, 64, 280-290.

House, J. Occupational stress and coronary heart disease: A review and theoretical integration. Journal of Health and Social Behavior, 1974(a), 15, 12-27.

House, J. The effects of occupational stress on physical health. In J. O'Toole (Eds.), Work and quality of life. Cambridge: The MIT Press, 1974(b).

Jenkins, C. Psychologic and social precursors of coronary heart disease. New England Journal of Medicine, 1971, 284, 244-255, 307-317.

Kasl, S. Epidemiological contributions to the study of work stress. In C. Cooper and R. Payne (Eds.), Stress at work, Chichester, U.K.: Wiley, 1980.

Kraut, A. Predicting turnover of employees from measured job attitudes. Organizational Behavior and Human Performance, 1975, 13, 233-243.

Kunin, T. The construction of a new type of attitude measure. Personnel Psychology, 1955, 8, 65-78.

Lyons, T. Turnover and absenteeism: A review of relationships and shared correlates. Personnel Psychology, 1972, 25, 271-281.

McDonald, B., and Gunderson, E. Correlates of job satisfaction in naval environments. Journal of Applied Psychology, 1974, 59(3), 371-373.

McNemar, Q. Psychological statistics. New York: Wiley & Sons, 1969.

March, J., and Simon, H. Organizations. New York: Wiley, 1958.

Melbin, M. Organizational practice and individual behavior: Absenteeism among psychiatric aides. American Sociological Review, 1961, 26, 14-23.

Miller, H., Katerberg, R., and Hulin, C. Evaluation of the Mobley, Horner and Hollingsworth model of employee turnover. Journal of Applied Psychology, 1979, 64, 509-517.

Mobley, W. Some unanswered questions in turnover and withdrawal research. Academy of Management Review, 1982, 7(1), 111-116.

Mobley, W., Griffeth, R., Hand, H., and Meglino, B. Review and conceptual analysis of the employee turnover process. Psychological Bulletin, 1979, 86, 493-522.

Mobley, W., Horner, S., and Hollingsworth, A. An evaluation of precursors of hospital employee turnover. Journal of Applied Psychology, 1978, 63, 408-414.

Muchinsky, P. Employee absenteeism: A review of the literature. Journal of Vocational Behavior, 1977, 10, 316-340.

Newman, J. Predicting absenteeism and turnover. Journal of Applied Psychology, 1974, 59, 610-615.

Porter, L., and Steers, R. Organizational, work and personal factors in employee turnover and absenteeism. Psychological Bulletin, 1973, 80, 151-176.

Salancik, G. and Pfeffer, J. A social information-processing approach to job attitudes and task design. Administrative Science Quarterly, 1978, 23, 224-253.

Sales, S. Organizational role as a risk factor in coronary heart disease. Administrative Science Quarterly, 1969, 14, 325-366.

Schneider, J. The greener grass phenomenon: Differential effects of a work context alternative on organizational participation and withdrawal intentions. Organizational Behavior and Human Performance, 1976, 16, 308-333.

Steers, R. and Rhodes, S. Major influences on employee attendance: A process model. Journal of Applied Psychology, 1978, 63, 391-407.

Trice, H., and Roman, P. Spirits and demons at work: Alcohol and other drugs on the job. Ithaca, N.Y.: Cornell University, 1972.

U.S. Department of Labor, Manpower Administration. Suggestions for control of turnover and absenteeism. Washington, D.C.: U.S. Government Printing Office, Stock number 2900-00161, 1972.

Waters, L., and Roach, D. Job satisfaction, behavioral intention and absenteeism as predictors of turnover. Personnel Psychology, 1979, 32, 393-397.

Footnotes

This article is based on the author's doctoral dissertation. The financial assistance of the Office of Naval Research (Grant # N000-14-75C-0904, Charles Hulin, principal investigator), the Charles W. Christie Foundation, and the Department of Psychology, University of Illinois are gratefully acknowledged. Correspondence concerning this manuscript should be addressed to Joseph G. Rosse, Industrial Relations Center, University of Minnesota, 537 Management & Economics Building, 271 - 19th Avenue South, Minneapolis, MN 55455.

Table 1

Pattern of Expected Correlations for

Each of the Conceptual Models

	Correlational Pattern		
Model	Within-time	Across-time	Additional evidence[1]
Spillover	Positive	Positive	n/a
Independent Forms	Zero	Zero	n/a
Progression of Withdrawal	Negative	Positive	hierarchical progression
Alternate Forms	Negative	Negative	constraint effects
Compensatory	Negative[2]	Negative	feedback effects

[1] See text for description; n/a means "not applicable"

[2] The exact prediction in this cell depends on the nature of the research design and the sample. With a sample of experienced employees there should be a negative correlation, whereas the association may be positive, negative or non-significant with new employees. In this longitudinal study of new employees, the Compensatory Model predicts increasingly negative correlations over time.

Table 2

Behavior Inter-Correlations

Variables	Within-time	Across-time
absence, lateness	.07	.21*
absence, turnover	.11	.57**
turnover, lateness	.03	-.05

* $p < .10$

** $p < .05$

Notes: Within-time correlations are the mean of 48 weekly correlations coefficients for each behavior; across-time correlations utilize annualized measures of absence and lateness and an overall measure of turnover (i.e., whether the person quit at any point during the study). In both cases, turnover was scored 0 for stayers and 1 for leavers.

Spearman rank-order correlations were computed for relations involving the annualized lateness measure, due to its extreme skew. All of other coefficients are Pearson product-moment correlations.

All correlations were corrected for attenuation due to unreliability; significance tests are based on raw coefficients.

N = 63.

Table 3

Constraining Effects of Behavior-Specific Attitudes

		R^2	ΔR^2
Lateness as dependent variable			
	Linear effect -- Job Satisfaction	.016	
(1)	+ Linear effect -- Attitude re: absence	.029	.013
	+ interaction effect	.042	.012
(2)	+ Linear effect -- Attitude re: turnover	.019	.003
	+ interaction effect	.030	.011
Absence as dependent variable			
	Linear effect -- Job Satisfaction	.001	
(1)	+ Linear effect -- Attitude re: lateness	.021	.020
	+ interaction effect	.026	.004
(2)	+ Linear effect -- Attitude re: turnover	.108	.107*
	+ interaction effect	.120	.012
Turnover as dependent variable			
	Linear effect -- Job Satisfaction	.037	
(1)	+ Linear effect -- Attitude re: lateness	.094	.057
	+ interaction effect	.122	.027
(2)	+ Linear effect -- Attitude re: absence	.047	.009
	+ interaction effect	.098	.051

* $p < .05$

Notes: The Annualized lateness measure underwent square-root transformation to reduce effect of outliers before being entered into equation.

N = 42.

Table 4

Constraining Effects of Ease of Mobility

Lateness as dependent variable	R^2	ΔR^2
Linear effect -- Job Satisfaction	.001	
+ Linear effect -- Ease of mobility	.137*	.136**
+ interaction effect	.163*	.026
Absence as dependent variable		
Linear effect - Job Satisfaction	.003	
+ Linear effect -- Ease of mobility	.036	.033
+ interaction effect	.036	.000
Turnover as dependent variable		
Linear effect -- Job Satisfaction	.052	
+ Linear effect - Ease of mobility	.061	.009
+ interaction effect	.082	.021

* $p < .10$

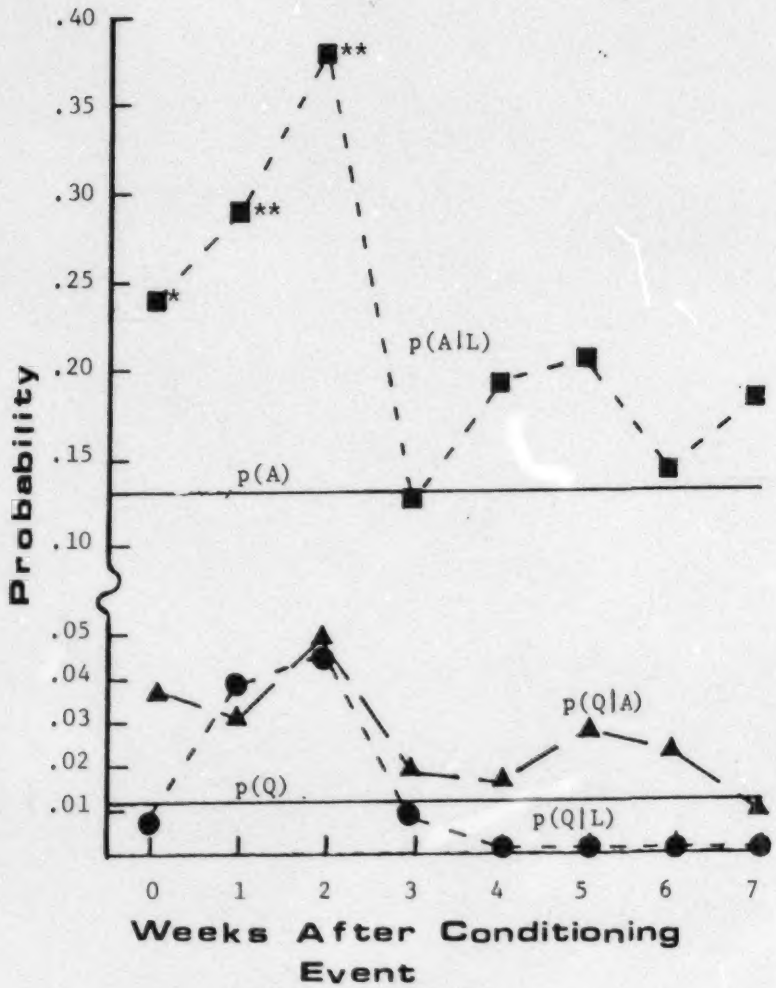
** $p < .05$

Notes: Ease of mobility refers to perceived alternative employment opportunities

N = 42.

Figure Caption

Figure 1. Plots of conditional probabilities of behaviors.



* significantly greater than baseline, $p < .10$

** significantly greater than baseline, $p < .05$